

MULTI-LAYER Pt ELECTRODE FOR DRAM AND FRAM  
WITH HIGH K DIELECTRIC MATERIALS

5 ABSTRACT

A multi-layer electrode (246) and method of  
fabrication thereof in which a conductive region (244) is  
separated from a barrier layer (222) by a first  
conductive liner (240) and a second conductive liner  
10 (242). First conductive layer (240) comprises Pt, and  
second conductive liner (242) comprises a thin layer of  
conductive oxide. The multi-layer electrode (246)  
prevents oxygen diffusion through the top conductive  
region (244) and reduces material variation during  
15 electrode patterning.